

graphite comprise particles having a vermiform or caterpillar-like shape.

Please add the following new claims:

RPB 30 5. A method of forming a packeting, comprising the steps of:
providing a plurality of parallel, spaced reinforcing fiber yarns;
coating the plurality of reinforcing fiber yarns with an adhesive;
bonding expanded graphite to the plurality of fiber yarns using the
adhesive, so that the expanded graphite surrounds the individual reinforcing fiber yarns; and
braiding together the bonded plurality of reinforcing fiber yarns to form a
packeting string.

31 6. The method as defined in claim 5, further comprising the step of:
providing the expanded graphite in particle form having a vermiform or
caterpillar-like shape.

REMARKS

The above noted claim amendments and the new claims are being presented to supplement the interview held at the Patent and trademark Office on November 8, 2000. This interview is of record as Paper No. 29.

In the final rejection dated August 29, 2000 (Paper No. 28), the examiner applied the Ueda et al '030 patent, the Ogino et al patent, the Case et al patent and the Schnitzler patent. These references were applied against claims 2 as four times amended and claims 3-4, they have not been applied against the presently submitted claims, however, and it is respectfully submitted that these patents do not render the presently submitted claims unpatentable under either 35 USC 102 or 103, as will now be demonstrated.

← most recent rejection is 12/14/00
paper # 31

newer?

The discussion that follows will refer to Enclosures A-C, which were shown to the examiner at the interview.

Enclosure A shows the formation of the expanded graphite particle from a graphite flake. The expanded graphite particle takes a caterpillar-like or vermiform shape. Ueda et al '030, Ogino et al and Schnitzler require that the expanded graphite particles be made into sheets for further use. Not the present invention. According to the present invention, the expanded particles are used to surround the fibers and are attached to the fibers by an adhesive. The result is the braided yarns shown in Fig. 2 of the present invention. A plurality of these braiding yarns are braided to form the string shown in Fig. 3.

Nothing in
claim language
defines our
invention
such as
Ueda where
formed into
sheet.

The configuration shown in Fig. 3 of this application possesses a synergistic action of the reinforcing fiber yarns and the expanded graphite adhered to the fiber yarns by an adhesive producing a great compression-restoring force, an excellent sealing property, toughness and an excellent sealing property. See page 3, lines 20-24 of the specification.

Enclosure B shows the formation of the sheets from the compression of the expanded graphite flakes and then the assembly of two sheets with fibers therebetween. This is not the same as taking individual expanded graphite particles and surrounding fiber yarns and adhering the expanded graphite particles to the fiber yarns with an adhesive. Enclosure C shows a flow diagram illustrating the different steps in making the packing according to Ueda et al '030, Ogino et al and Schnitzler. The formations shown are discussed in the background portion of the specification of this application. In this section the disadvantages of these configurations are discussed.

The present claim group defines the invention as discussed above. Note that in


dependent
← claim? - non-elected

independent 4 the reinforcing braiding yarns are arranged in parallel and coated with an adhesive so that the expanded graphite particles (not sheets) surround the fibers and are held together by the adhesive. The thus formed yarns are then braided. The result is a packing which cannot be obtained by following the teachings of either Ueda et al '030, Ogine et al, Case et al or Schnitzler, whether considered individually or in any of their various combinations. This conclusion is so because none of these references teach the use of expanded graphite particles as is demonstrated by the Enclosures.

Method claim 5 has been added as was indicated at the interview. The steps of the method as defined are clearly supported by the application as originally filed. Like claim 4, claim 5 also patentably distinguishes over the four noted patents.

The examiner is urged to consider the above amendments and comments in his examination and to find claims 2-6 allowable.

Respectfully submitted,


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